

Anadarko
Petroleum Corporation



**BAKER
HUGHES**

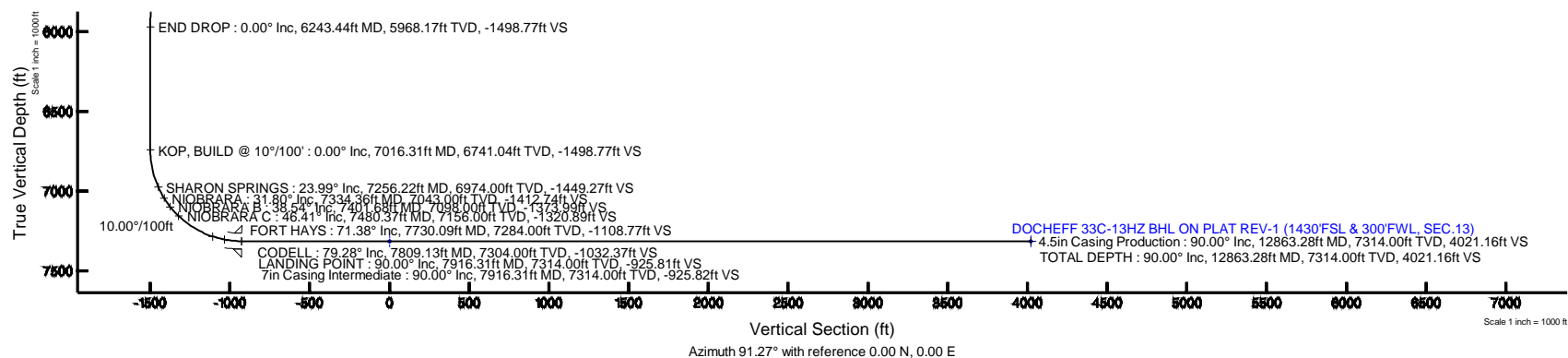
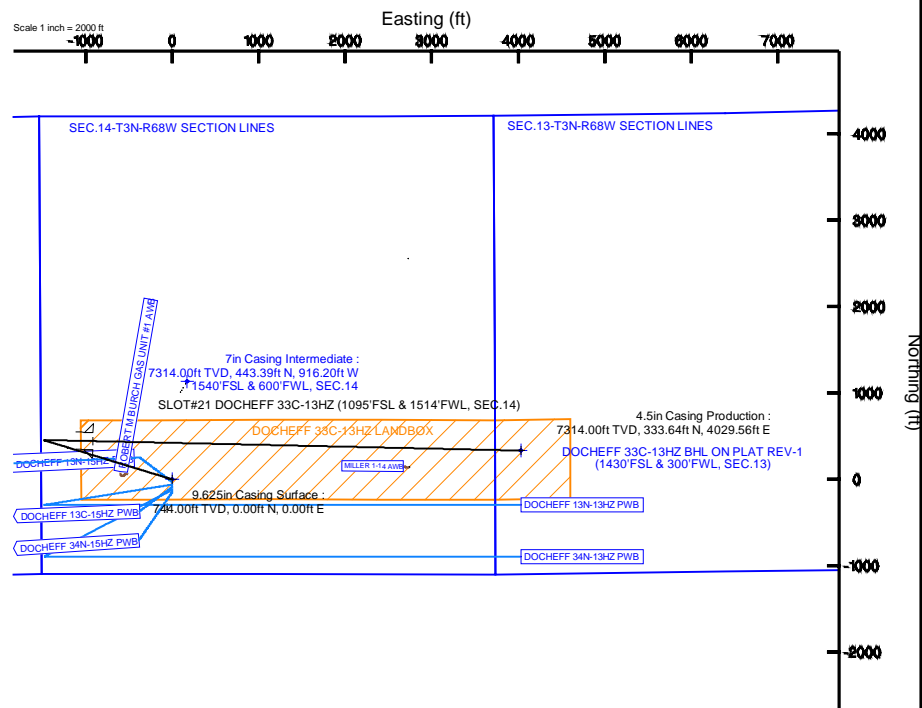
True vertical depths are referenced to PERMT (17KB) (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to PERMT (17KB) (RKB)	North Reference: True north
PERMT (17KB) (RKB) to Mean Sea Level: 4952 feet	Scale: True distance
Mean Sea Level to Mud line (N Slot: SLOTE21 DOCHIEFF 33C-194Z (1095 FSL & 1514 FWL, SEC.14)) : feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by ccrean on 11/SEP/2014

Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 14-T3N-R66W			3146766.378	1323729.589	40°13'15.029"N	104°58'27.800"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SLOT#21 DOCHIEFF 33C-13HZ (1095FSL & 1514FWL, SEC. 14)	399.52	56.63	3146820.633	1324129.416	40°13'18.977"N	104°58'27.170"W
PERMIT (17Kb) (RkB) to Mud line (A Slot: SLOT#21 DOCHIEFF 33C-13HZ (1095FSL & 1514FWL, SEC. 14))					4952ft	
Mean Sea Level to Mud line (A Slot: SLOT#21 DOCHIEFF 33C-13HZ (1095FSL & 1514FWL, SEC. 14))					0ft	
PERMIT (17Kb) (RkB) to Mean Sea Level					4952ft	

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
17.00	12863.28	NaviTrak	NaviTrak (IFR) 1		DOCHEFF 33C-13HZ PWB

Design Comment	MD (ft)	Inc (")	Az (")	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
TIE ON	17.00	0.000	287.030	17.00	0.00	0.00	0.00	0.00
BEGIN NUDGE	1000.00	0.000	287.030	1000.00	0.00	0.00	0.00	0.00
END NUDGE	2100.00	22.000	287.030	2073.17	61.09	-199.46	2.00	-200.76
BEGIN DROP	5143.44	22.000	287.030	4895.00	395.00	-1289.56	0.00	-1298.01
END DROP	6243.44	0.000	91.270	5968.17	456.09	-1489.01	2.00	-1498.77
KOP, BUILD @ 10°/100'	7016.31	0.000	91.270	6741.04	456.09	-1489.01	0.00	-1498.77
LANDING POINT	7916.31	90.000	91.270	7314.00	443.39	-916.20	10.00	-925.81
TOTAL DEPTH	12863.28	90.000	91.272	7314.00	333.64	4029.56	0.00	4021.16

Name	MD (ft)	TYD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC 13-12N-R6W SECTION LINES	1.00	1133.68	173.91	3149697.81	1326326.06	40°13'20.1807N	104°58'24.938W	
SEC 13-14N-R6W SECTION LINES	4952.00	3367.89	8445.68	3155245.81	1327547.17	40°13'52.244N	104°56'38.278W	
SEC 14-12N-R6W SECTION LINES	4952.00	3367.89	8445.68	3155245.81	1327547.17	40°13'52.244N	104°56'38.278W	
DOOEFF 33C-1342 B/E ON PLAT REV-1 (1430PSL & 300FWL, SEC 13)	12863.28	7314.04	333.64	4029.56	3150487.96	40°15'22.271N	104°57'35.222W	
DOOEFF 33C-1342 / ANDR/B	7314.04	0.00	0.00	3146800.83	1324129.42	40°13'18.8772N	104°57'07.1700W	



REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

REPORT SETUP INFORMATION			
Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.0.0
North Reference	True	User	Precain
Scale	0.999957	Report Generated	11/Sep/2014 at 10:54
Convergence at slot	n/a	Database/Source file	WellArchitectDB/DOCHEFF_33C-13HZ_PWB.xml

WELLPATH LOCATION						
	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	399.52	56.63	3146820.63	1324129.42	40°13'18.977"N	104°58'27.170"W
Facility Reference Pt			3146766.38	1323729.59	40°13'15.029"N	104°58'27.900"W
Field Reference Pt			3197771.84	1268891.29	40°04'09.600"N	104°47'36.000"W

WELLPATH DATUM			
Calculation method	Minimum curvature	PERMIT (17'KB) (RKB) to Facility Vertical Datum	4952.00ft
Horizontal Reference Pt	Slot	PERMIT (17'KB) (RKB) to Mean Sea Level	4952.00ft
Vertical Reference Pt	PERMIT (17'KB) (RKB)	PERMIT (17'KB) (RKB) to Mud Line at Slot (SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14))	4952.00ft
MD Reference Pt	PERMIT (17'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	91.27°

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	287.030	0.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
17.00	0.000	287.030	17.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	TIE ON
117.00†	0.000	287.030	117.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
217.00†	0.000	287.030	217.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
317.00†	0.000	287.030	317.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
417.00†	0.000	287.030	417.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
517.00†	0.000	287.030	517.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
552.00†	0.000	287.030	552.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	BASE FOX HILLS
617.00†	0.000	287.030	617.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
717.00†	0.000	287.030	717.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
744.00†	0.000	287.030	744.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	SURFACE CSG SETTING DEPTH
817.00†	0.000	287.030	817.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
917.00†	0.000	287.030	917.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	
1000.00	0.000	287.030	1000.00	0.00	0.00	0.00	40°13'18.977"N	104°58'27.170"W	0.00	BEGIN NUDGE
1017.00†	0.340	287.030	1017.00	-0.05	0.01	-0.05	40°13'18.977"N	104°58'27.171"W	2.00	
1117.00†	2.340	287.030	1116.97	-2.30	0.70	-2.28	40°13'18.984"N	104°58'27.199"W	2.00	
1217.00†	4.340	287.030	1216.79	-7.91	2.41	-7.85	40°13'19.001"N	104°58'27.271"W	2.00	
1317.00†	6.340	287.030	1316.35	-16.86	5.13	-16.75	40°13'19.028"N	104°58'27.386"W	2.00	
1417.00†	8.340	287.030	1415.53	-29.16	8.87	-28.97	40°13'19.065"N	104°58'27.543"W	2.00	
1517.00†	10.340	287.030	1514.20	-44.78	13.63	-44.48	40°13'19.112"N	104°58'27.743"W	2.00	
1617.00†	12.340	287.030	1612.24	-63.70	19.38	-63.28	40°13'19.169"N	104°58'27.986"W	2.00	
1717.00†	14.340	287.030	1709.54	-85.90	26.14	-85.34	40°13'19.235"N	104°58'28.270"W	2.00	
1817.00†	16.340	287.030	1805.97	-111.36	33.89	-110.64	40°13'19.312"N	104°58'28.596"W	2.00	
1917.00†	18.340	287.030	1901.42	-140.05	42.62	-139.13	40°13'19.398"N	104°58'28.964"W	2.00	
2017.00†	20.340	287.030	1995.77	-171.92	52.32	-170.80	40°13'19.494"N	104°58'29.372"W	2.00	
2100.00	22.000	287.030	2073.17	-200.76	61.09	-199.46	40°13'19.581"N	104°58'29.741"W	2.00	END NUDGE
2117.00†	22.000	287.030	2088.93	-206.89	62.96	-205.55	40°13'19.599"N	104°58'29.820"W	0.00	
2217.00†	22.000	287.030	2181.65	-242.94	73.93	-241.36	40°13'19.708"N	104°58'30.282"W	0.00	
2317.00†	22.000	287.030	2274.37	-279.00	84.90	-277.18	40°13'19.816"N	104°58'30.743"W	0.00	
2417.00†	22.000	287.030	2367.09	-315.05	95.87	-313.00	40°13'19.924"N	104°58'31.205"W	0.00	
2517.00†	22.000	287.030	2459.80	-351.10	106.84	-348.82	40°13'20.033"N	104°58'31.667"W	0.00	
2617.00†	22.000	287.030	2552.52	-387.16	117.82	-384.64	40°13'20.141"N	104°58'32.129"W	0.00	
2717.00†	22.000	287.030	2645.24	-423.21	128.79	-420.45	40°13'20.250"N	104°58'32.590"W	0.00	
2817.00†	22.000	287.030	2737.96	-459.26	139.76	-456.27	40°13'20.358"N	104°58'33.052"W	0.00	
2917.00†	22.000	287.030	2830.68	-495.31	150.73	-492.09	40°13'20.466"N	104°58'33.514"W	0.00	
3017.00†	22.000	287.030	2923.40	-531.37	161.70	-527.91	40°13'20.575"N	104°58'33.976"W	0.00	
3117.00†	22.000	287.030	3016.11	-567.42	172.67	-563.73	40°13'20.683"N	104°58'34.437"W	0.00	
3217.00†	22.000	287.030	3108.83	-603.47	183.64	-599.54	40°13'20.792"N	104°58'34.899"W	0.00	
3317.00†	22.000	287.030	3201.55	-639.53	194.61	-635.36	40°13'20.900"N	104°58'35.361"W	0.00	
3417.00†	22.000	287.030	3294.27	-675.58	205.58	-671.18	40°13'21.008"N	104°58'35.823"W	0.00	
3517.00†	22.000	287.030	3386.99	-711.63	216.56	-707.00	40°13'21.117"N	104°58'36.284"W	0.00	
3617.00†	22.000	287.030	3479.71	-747.68	227.53	-742.82	40°13'21.225"N	104°58'36.746"W	0.00	
3717.00†	22.000	287.030	3572.43	-783.74	238.50	-778.63	40°13'21.334"N	104°58'37.208"W	0.00	
3799.59†	22.000	287.030	3649.00	-813.51	247.56	-808.22	40°13'21.423"N	104°58'37.589"W	0.00	PARKMAN
3817.00†	22.000	287.030	3665.14	-819.79	249.47	-814.45	40°13'21.442"N	104°58'37.670"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
3917.00†	22.000	287.030	3757.86	-855.84	260.44	-850.27	40°13'21.551"N	104°58'38.131"W	0.00	
4017.00†	22.000	287.030	3850.58	-891.89	271.41	-886.09	40°13'21.659"N	104°58'38.593"W	0.00	
4117.00†	22.000	287.030	3943.30	-927.95	282.38	-921.91	40°13'21.767"N	104°58'39.055"W	0.00	
4217.00†	22.000	287.030	4036.02	-964.00	293.35	-957.72	40°13'21.876"N	104°58'39.517"W	0.00	
4298.95†	22.000	287.030	4112.00	-993.55	302.35	-987.08	40°13'21.965"N	104°58'39.895"W	0.00	SUSSEX
4317.00†	22.000	287.030	4128.74	-1000.05	304.33	-993.54	40°13'21.984"N	104°58'39.978"W	0.00	
4417.00†	22.000	287.030	4221.45	-1036.11	315.30	-1029.36	40°13'22.093"N	104°58'40.440"W	0.00	
4517.00†	22.000	287.030	4314.17	-1072.16	326.27	-1065.18	40°13'22.201"N	104°58'40.902"W	0.00	
4617.00†	22.000	287.030	4406.89	-1108.21	337.24	-1101.00	40°13'22.309"N	104°58'41.364"W	0.00	
4717.00†	22.000	287.030	4499.61	-1144.26	348.21	-1136.81	40°13'22.418"N	104°58'41.825"W	0.00	
4817.00†	22.000	287.030	4592.33	-1180.32	359.18	-1172.63	40°13'22.526"N	104°58'42.287"W	0.00	
4917.00†	22.000	287.030	4685.05	-1216.37	370.15	-1208.45	40°13'22.635"N	104°58'42.749"W	0.00	
5017.00†	22.000	287.030	4777.76	-1252.42	381.12	-1244.27	40°13'22.743"N	104°58'43.211"W	0.00	
5117.00†	22.000	287.030	4870.48	-1288.48	392.09	-1280.09	40°13'22.851"N	104°58'43.672"W	0.00	
5143.44	22.000	287.030	4895.00	-1298.01	395.00	-1289.56	40°13'22.880"N	104°58'43.795"W	0.00	BEGIN DROP
5217.00†	20.529	287.030	4963.55	-1323.68	402.81	-1315.07	40°13'22.957"N	104°58'44.123"W	2.00	
5317.00†	18.529	287.030	5057.79	-1355.85	412.60	-1347.03	40°13'23.054"N	104°58'44.535"W	2.00	
5417.00†	16.529	287.030	5153.14	-1384.84	421.42	-1375.82	40°13'23.141"N	104°58'44.907"W	2.00	
5517.00†	14.529	287.030	5249.49	-1410.60	429.26	-1401.42	40°13'23.219"N	104°58'45.237"W	2.00	
5617.00†	12.529	287.030	5346.71	-1433.12	436.11	-1423.79	40°13'23.286"N	104°58'45.525"W	2.00	
5717.00†	10.529	287.030	5444.68	-1452.35	441.96	-1442.89	40°13'23.344"N	104°58'45.771"W	2.00	
5817.00†	8.529	287.030	5543.30	-1468.28	446.81	-1458.72	40°13'23.392"N	104°58'45.975"W	2.00	
5917.00†	6.529	287.030	5642.43	-1480.89	450.65	-1471.25	40°13'23.430"N	104°58'46.137"W	2.00	
6017.00†	4.529	287.030	5741.96	-1490.16	453.47	-1480.46	40°13'23.458"N	104°58'46.256"W	2.00	
6117.00†	2.529	287.030	5841.77	-1496.09	455.27	-1486.35	40°13'23.476"N	104°58'46.332"W	2.00	
6217.00†	0.529	287.030	5941.73	-1498.65	456.05	-1488.90	40°13'23.483"N	104°58'46.364"W	2.00	
6243.44	0.000	91.270	5968.17	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	2.00	END DROP
6317.00†	0.000	91.270	6041.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
6417.00†	0.000	91.270	6141.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
6517.00†	0.000	91.270	6241.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
6617.00†	0.000	91.270	6341.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
6717.00†	0.000	91.270	6441.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
6817.00†	0.000	91.270	6541.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
6917.00†	0.000	91.270	6641.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	
7016.31	0.000	91.270	6741.04	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	0.00	KOP, BUILD @ 10°/100'
7017.00†	0.069	91.270	6741.73	-1498.77	456.09	-1489.01	40°13'23.484"N	104°58'46.366"W	10.00	
7117.00†	10.069	91.270	6841.21	-1489.95	455.89	-1480.19	40°13'23.482"N	104°58'46.252"W	10.00	
7217.00†	20.069	91.270	6937.65	-1463.98	455.32	-1454.23	40°13'23.476"N	104°58'45.918"W	10.00	
7256.22†	23.991	91.270	6974.00	-1449.27	454.99	-1439.53	40°13'23.473"N	104°58'45.728"W	10.00	SHARON SPRINGS
7317.00†	30.069	91.270	7028.11	-1421.67	454.38	-1411.93	40°13'23.467"N	104°58'45.372"W	10.00	
7334.36†	31.804	91.270	7043.00	-1412.74	454.18	-1403.01	40°13'23.465"N	104°58'45.257"W	10.00	NIOBRARA
7401.68†	38.537	91.270	7098.00	-1373.99	453.32	-1364.26	40°13'23.456"N	104°58'44.758"W	10.00	NIOBRARA B
7417.00†	40.069	91.270	7109.86	-1364.28	453.11	-1354.56	40°13'23.454"N	104°58'44.633"W	10.00	
7480.37†	46.406	91.270	7156.00	-1320.89	452.15	-1311.18	40°13'23.445"N	104°58'44.073"W	10.00	NIOBRARA C
7517.00†	50.069	91.270	7180.39	-1293.58	451.54	-1283.87	40°13'23.439"N	104°58'43.721"W	10.00	

Planned Wellpath Report

DOCHEFF 33C-13HZ (PERMIT REV-1) PWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7617.00†	60.069	91.270	7237.58	-1211.70	449.73	-1202.01	40°13'23.421"N	104°58'42.666"W	10.00	
7717.00†	70.069	91.270	7279.68	-1121.13	447.72	-1111.47	40°13'23.401"N	104°58'41.499"W	10.00	
7730.09†	71.378	91.270	7284.00	-1108.77	447.45	-1099.11	40°13'23.398"N	104°58'41.339"W	10.00	FORT HAYS
7809.13†	79.282	91.270	7304.00	-1032.37	445.75	-1022.73	40°13'23.382"N	104°58'40.355"W	10.00	CODELL
7817.00†	80.069	91.270	7305.41	-1024.63	445.58	-1014.99	40°13'23.380"N	104°58'40.255"W	10.00	
7916.31	90.000	91.270	7314.00	-925.81	443.39	-916.20	40°13'23.358"N	104°58'38.981"W	10.00	LANDING POINT
7917.00†	90.000	91.270	7314.00	-925.13	443.38	-915.51	40°13'23.358"N	104°58'38.972"W	0.00	
8017.00†	90.000	91.270	7314.00	-825.13	441.16	-815.54	40°13'23.336"N	104°58'37.684"W	0.00	
8117.00†	90.000	91.270	7314.00	-725.13	438.94	-715.56	40°13'23.315"N	104°58'36.395"W	0.00	
8217.00†	90.000	91.270	7314.00	-625.13	436.73	-615.58	40°13'23.293"N	104°58'35.106"W	0.00	
8317.00†	90.000	91.270	7314.00	-525.13	434.51	-515.61	40°13'23.271"N	104°58'33.817"W	0.00	
8417.00†	90.000	91.270	7314.00	-425.13	432.29	-415.63	40°13'23.249"N	104°58'32.528"W	0.00	
8517.00†	90.000	91.270	7314.00	-325.13	430.08	-315.66	40°13'23.227"N	104°58'31.239"W	0.00	
8617.00†	90.000	91.270	7314.00	-225.13	427.86	-215.68	40°13'23.205"N	104°58'29.951"W	0.00	
8717.00†	90.000	91.270	7314.00	-125.13	425.64	-115.71	40°13'23.183"N	104°58'28.662"W	0.00	
8817.00†	90.000	91.270	7314.00	-25.13	423.42	-15.73	40°13'23.161"N	104°58'27.373"W	0.00	
8917.00†	90.000	91.270	7314.00	74.87	421.21	84.24	40°13'23.139"N	104°58'26.084"W	0.00	
9017.00†	90.000	91.271	7314.00	174.87	418.99	184.22	40°13'23.117"N	104°58'24.795"W	0.00	
9117.00†	90.000	91.271	7314.00	274.87	416.77	284.19	40°13'23.096"N	104°58'23.506"W	0.00	
9217.00†	90.000	91.271	7314.00	374.87	414.56	384.17	40°13'23.074"N	104°58'22.217"W	0.00	
9317.00†	90.000	91.271	7314.00	474.87	412.34	484.15	40°13'23.052"N	104°58'20.929"W	0.00	
9417.00†	90.000	91.271	7314.00	574.87	410.12	584.12	40°13'23.030"N	104°58'19.640"W	0.00	
9517.00†	90.000	91.271	7314.00	674.87	407.90	684.10	40°13'23.008"N	104°58'18.351"W	0.00	
9617.00†	90.000	91.271	7314.00	774.87	405.68	784.07	40°13'22.986"N	104°58'17.062"W	0.00	
9717.00†	90.000	91.271	7314.00	874.87	403.47	884.05	40°13'22.964"N	104°58'15.773"W	0.00	
9817.00†	90.000	91.271	7314.00	974.87	401.25	984.02	40°13'22.942"N	104°58'14.484"W	0.00	
9917.00†	90.000	91.271	7314.00	1074.87	399.03	1084.00	40°13'22.920"N	104°58'13.195"W	0.00	
10017.00†	90.000	91.271	7314.00	1174.87	396.81	1183.97	40°13'22.898"N	104°58'11.907"W	0.00	
10117.00†	90.000	91.271	7314.00	1274.87	394.59	1283.95	40°13'22.876"N	104°58'10.618"W	0.00	
10217.00†	90.000	91.271	7314.00	1374.87	392.38	1383.92	40°13'22.854"N	104°58'09.329"W	0.00	
10317.00†	90.000	91.271	7314.00	1474.87	390.16	1483.90	40°13'22.832"N	104°58'08.040"W	0.00	
10417.00†	90.000	91.271	7314.00	1574.87	387.94	1583.87	40°13'22.810"N	104°58'06.751"W	0.00	
10517.00†	90.000	91.271	7314.00	1674.87	385.72	1683.85	40°13'22.788"N	104°58'05.462"W	0.00	
10617.00†	90.000	91.271	7314.00	1774.87	383.50	1783.83	40°13'22.766"N	104°58'04.174"W	0.00	
10717.00†	90.000	91.271	7314.00	1874.87	381.28	1883.80	40°13'22.744"N	104°58'02.885"W	0.00	
10817.00†	90.000	91.271	7314.00	1974.87	379.06	1983.78	40°13'22.722"N	104°58'01.596"W	0.00	
10917.00†	90.000	91.271	7314.00	2074.87	376.85	2083.75	40°13'22.700"N	104°58'00.307"W	0.00	
11017.00†	90.000	91.272	7314.00	2174.87	374.63	2183.73	40°13'22.678"N	104°57'59.018"W	0.00	
11117.00†	90.000	91.272	7314.00	2274.87	372.41	2283.70	40°13'22.656"N	104°57'57.729"W	0.00	
11217.00†	90.000	91.272	7314.00	2374.87	370.19	2383.68	40°13'22.634"N	104°57'56.440"W	0.00	
11317.00†	90.000	91.272	7314.00	2474.87	367.97	2483.65	40°13'22.612"N	104°57'55.152"W	0.00	
11417.00†	90.000	91.272	7314.00	2574.87	365.75	2583.63	40°13'22.590"N	104°57'53.863"W	0.00	
11517.00†	90.000	91.272	7314.00	2674.87	363.53	2683.60	40°13'22.568"N	104°57'52.574"W	0.00	
11617.00†	90.000	91.272	7314.00	2774.87	361.31	2783.58	40°13'22.546"N	104°57'51.285"W	0.00	
11717.00†	90.000	91.272	7314.00	2874.87	359.09	2883.55	40°13'22.524"N	104°57'49.996"W	0.00	

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH DATA (147 stations) † = interpolated/extrapolated station										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
11817.00†	90.000	91.272	7314.00	2974.87	356.87	2983.53	40°13'22.502"N	104°57'48.707"W	0.00	
11917.00†	90.000	91.272	7314.00	3074.87	354.65	3083.51	40°13'22.480"N	104°57'47.419"W	0.00	
12017.00†	90.000	91.272	7314.00	3174.87	352.43	3183.48	40°13'22.458"N	104°57'46.130"W	0.00	
12117.00†	90.000	91.272	7314.00	3274.87	350.21	3283.46	40°13'22.436"N	104°57'44.841"W	0.00	
12217.00†	90.000	91.272	7314.00	3374.87	347.99	3383.43	40°13'22.414"N	104°57'43.552"W	0.00	
12317.00†	90.000	91.272	7314.00	3474.87	345.77	3483.41	40°13'22.391"N	104°57'42.263"W	0.00	
12417.00†	90.000	91.272	7314.00	3574.87	343.55	3583.38	40°13'22.369"N	104°57'40.974"W	0.00	
12517.00†	90.000	91.272	7314.00	3674.87	341.33	3683.36	40°13'22.347"N	104°57'39.685"W	0.00	
12617.00†	90.000	91.272	7314.00	3774.87	339.11	3783.33	40°13'22.325"N	104°57'38.397"W	0.00	
12717.00†	90.000	91.272	7314.00	3874.87	336.89	3883.31	40°13'22.303"N	104°57'37.108"W	0.00	
12817.00†	90.000	91.272	7314.00	3974.87	334.67	3983.28	40°13'22.281"N	104°57'35.819"W	0.00	
12863.28	90.000	91.272	7314.00 ¹	4021.16	333.64	4029.56	40°13'22.271"N	104°57'35.222"W	0.00	TOTAL DEPTH

HOLE & CASING SECTIONS - Ref Wellbore: DOCHEFF 33C-13HZ PWB Ref Wellpath: DOCHEFF 33C-13HZ (PERMIT REV-1) PWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
13.5in Open Hole	17.00	744.00	727.00	17.00	744.00	0.00	0.00	0.00	0.00
9.625in Casing Surface	17.00	744.00	727.00	17.00	744.00	0.00	0.00	0.00	0.00
8.75in Open Hole	744.00	7916.31	7172.31	744.00	7314.00	0.00	0.00	443.39	-916.20
7in Casing Intermediate	17.00	7916.31	7899.31	17.00	7314.00	0.00	0.00	443.39	-916.20
6.125in Open Hole	7916.31	12863.28	4946.97	7314.00	7314.00	443.39	-916.20	333.64	4029.55
4.5in Casing Production	17.00	12863.28	12846.28	17.00	7314.00	0.00	0.00	333.64	4029.56

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

TARGETS									
Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.15-T3N-R68W SECTION LINES		1.00	1133.68	173.91	3146987.81	1325264.06	40°13'30.180"N	104°58'24.928"W	polygon
SEC.13-T3N-R68W SECTION LINES		4952.00	3367.89	8445.68	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
SEC.14-T3N-R68W SECTION LINES		4952.00	3367.89	8445.68	3155245.81	1327547.17	40°13'52.244"N	104°56'38.278"W	polygon
1) DOCHEFF 33C-13HZ BHL ON PLAT REV-1 (1430'FSL & 300'FWL, SEC.13)	12863.28	7314.00	333.64	4029.56	3150847.96	1324486.93	40°13'22.271"N	104°57'35.222"W	point
DOCHEFF 33C-13HZ LANDBOX		7314.00	0.00	0.00	3146820.63	1324129.42	40°13'18.977"N	104°58'27.170"W	polygon

SURVEY PROGRAM - Ref Wellbore: DOCHEFF 33C-13HZ PWB Ref Wellpath: DOCHEFF 33C-13HZ (PERMIT REV-1) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
17.00	12863.28	NaviTrak (IFR)_1		DOCHEFF 33C-13HZ PWB

REFERENCE WELLPATH IDENTIFICATION			
Operator	KERR-MCGEE OIL & GAS ONSHORE LP	Slot	SLOT#21 DOCHEFF 33C-13HZ (1095'FSL & 1514'FWL, SEC.14)
Area	COLORADO	Well	DOCHEFF 33C-13HZ
Field	WELD COUNTY (KERR MCGEE)	Wellbore	DOCHEFF 33C-13HZ PWB
Facility	SEC.14-T3N-R68W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
552.00	0.000	287.030	552.00	BASE FOX HILLS
744.00	0.000	287.030	744.00	SURFACE CSG SETTING DEPTH
3799.59	22.000	287.030	3649.00	PARKMAN
4298.95	22.000	287.030	4112.00	SUSSEX
7256.22	23.991	91.270	6974.00	SHARON SPRINGS
7334.36	31.804	91.270	7043.00	NIOBRARA
7401.68	38.537	91.270	7098.00	NIOBRARA B
7480.37	46.406	91.270	7156.00	NIOBRARA C
7730.09	71.378	91.270	7284.00	FORT HAYS
7809.13	79.282	91.270	7304.00	CODELL

DESIGN COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
17.00	0.000	287.030	17.00	TIE ON
1000.00	0.000	287.030	1000.00	BEGIN NUDGE
2100.00	22.000	287.030	2073.17	END NUDGE
5143.44	22.000	287.030	4895.00	BEGIN DROP
6243.44	0.000	91.270	5968.17	END DROP
7016.31	0.000	91.270	6741.04	KOP, BUILD @ 10°/100'
7916.31	90.000	91.270	7314.00	LANDING POINT
12863.28	90.000	91.272	7314.00	TOTAL DEPTH